



State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks, and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICES FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Wastewater Management Division
103 South Main Street - Sewing Bldg.
Waterbury, Vermont 05671-0405

Telephone: (802) 241-3822
Fax: (802) 241-2596
www.anr.state.vt.us/dec/ww/wwwmd.cfm

May 12, 2006

Wendy Sendra
PO Box 87
Wallingford, VT 05773-0087

Re: Final Discharge Permit #3-0365

Dear Ms Sendra:

Enclosed is your copy of the above referenced permit, which has been signed by the Director of the Wastewater Management Division for the Commissioner of the Department of Environmental Conservation. Please read the permit carefully and familiarize yourself with all its terms and conditions. Your attention is particularly directed to those conditions which may require written responses by certain dates.

During the public notice period we received one comment from the Fire District. The request was to exclude the reporting of the daily minimum and maximum flow results. Because the information will be available on the flow charts if needed, we have agreed to remove the reporting requirement for daily minimum/maximum readings on the monthly discharge monitoring report form.

If you have any questions concerning your permit, please contact Carol Carpenter at 241-3828.

Sincerely,

Brian D. Kooiker, Chief
Discharge Permits Section

Enclosure

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WASTEWATER MANAGEMENT DIVISION
103 SOUTH MAIN STREET
WATERBURY, VERMONT 05671-0405

Permit No. 3-0365
File No. 11-25
Project ID No. RU96-0141
NPDES No. VT0100552

Name of Applicant: Wallingford Fire District #1
PO Box 87
Wallingford, VT 05773

Expiration Date: September 30, 2011

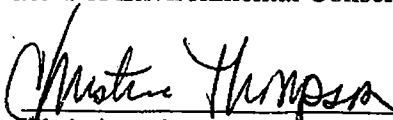
DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act as amended (hereinafter referred to as the "Act") and the Federal Clean Water Act, as amended (33 U.S.C. §1251 et seq), the Wallingford Fire District #1, Wallingford, Vermont (hereinafter referred to as the "permittee") is authorized by the Secretary, Agency of Natural Resources, Waterbury, Vermont, to discharge from the Wallingford Fire District #1 Wastewater Treatment Facility to Otter Creek in accordance with the following general and special conditions.

This permit shall become effective on October 1, 2006.

Jeffrey Wennberg, Commissioner
Department of Environmental Conservation

By:


Christine Thompson, Director
Wastewater Management Division

Date:



I. SPECIAL CONDITIONS

A. EFFLUENT LIMITS

1. Until September 30, 2011, the permittee is authorized to discharge from S/N 001 - outfall, the Wallingford Fire District #1 Wastewater Treatment Facility, to Otter Creek, an effluent whose characteristics shall not exceed the values listed below:

DISCHARGE LIMITATIONS								
Effluent Characteristic	Annual Limit	Monthly Average	Weekly Average	Maximum Day	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
		(lbs / day)	(Concentration)	
Flow (annual average)	0.12 MGD							
Biochemical Oxygen Demand, 5-day, 20° C		22.5 lbs	30 lbs		30 mg/l	45 mg/l	50 mg/l	
Total Suspended Solids		22.5 lbs	30 lbs		30 mg/l	45 mg/l	50 mg/l	
Total Phosphorus (Total Annual Pounds) (a)	1827 lbs				Monitor only			
Settleable Solids								1.0 ml/l
Total Residual Chlorine						1.0 mg/l		2.0 mg/l
<i>Escherichia coli</i> Bacteria								77/100 ml
pH					Between 6.5 and 8.5 Standard Units			

(a) Total Annual Pounds of Phosphorus discharged shall be defined as the sum of all the Total Monthly Pounds of Phosphorus discharged for the calendar year.
Total Monthly Pounds of Phosphorus discharged shall be calculated as follows:
(Monthly Average Phosphorus Concentration) x (Total Monthly Flow) x 8.34 (See Total Phosphorus monitoring report form WR43-PO4).

2. The effluent shall not have concentrations or combinations of contaminants including oil, grease, scum, foam, or floating solids which would cause a violation of the water quality standards of the receiving waters.
3. The discharge shall not cause visible discoloration of the receiving waters.
4. The monthly average concentrations of BOD₅ and total suspended solids in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD₅ and total suspended solids in the influent into the permittee's wastewater treatment facilities. For the purposes of determining whether the permittee is in compliance with this condition, samples from the discharge and the influent shall be taken with appropriate allowance for detention times. See Part I, Special Conditions, Paragraph F.2., Effluent Monitoring.
5. When the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the permitted flow limitation, the permittee shall submit to the permitting authority projected loadings and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.
6. Any action on the part of the Agency of Natural Resources in reviewing, commenting upon or approving plans and specifications for the construction of wastewater treatment facilities shall not relieve the permittee from the responsibility to achieve effluent limitations set forth in this permit and shall not constitute a waiver of, or act of estoppel against any remedy available to the Agency, the State of Vermont or the federal government for failure to meet any requirement set forth in this permit or imposed by state or federal law.

B. WASTE MANAGEMENT ZONE

In accordance with 10 V.S.A. Section 1252, this permit hereby establishes a waste management zone that extends from the outfall of the Wallingford Fire District #1 Wastewater Treatment Facility in Otter Creek downstream one mile.

C. REAPPLICATION

If the permittee desires to continue to discharge after the expiration of this permit, the permittee shall reapply on the application forms then in use at least 180 days before this permit expires.

Reapply for a Discharge Permit by: March 31, 2011.

D. OPERATING FEES

This discharge is subject to operating fees. The permittee shall submit the operating fees in accordance with the procedures provided by the Secretary.

E. MONITORING AND REPORTING

1. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used shall conform to regulations published pursuant to Section 304(g) of the Clean Water Act, under which such procedures may be required. Guidelines establishing these test procedures have been published in the Code of Federal Regulations, Title 40, Part 136 (Federal Register, Vol. 56, No. 195, July 1, 1999 or as amended).

If applicable, *Escherichia coli* shall be tested using test method 9213 D. found in Standard Methods for the Examination of Water and Wastewater, 18th or subsequent edition(s), or other EPA approved methods for wastewater.

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The permittee shall identify the effluent sampling location used for each discharge.

2. Effluent Monitoring

The permittee shall monitor and record the quality and quantity of discharge(s) S/N 001 - outfall, the Wallingford Fire District #1 Wastewater Treatment Facility, according to the following schedule and other provisions until September 30, 2011.

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Daily Total
BOD ₅	1 x monthly	8-hour composite ⁽¹⁾
TSS	1 x monthly	8-hour composite ⁽¹⁾
Total Phosphorus	1 x monthly	8-hour composite ⁽¹⁾
Settleable Solids	1 x daily	grab ⁽²⁾
<i>Escherichia coli</i> Bacteria	1 x monthly	grab ⁽³⁾
Total Residual Chlorine	1 x daily	grab ⁽³⁾
pH	1 x daily	grab

(1) Composite samples for BOD₅, TSS, and Total Phosphorus shall be taken during the hours 6:00 A.M. to 6:00 P.M., unless otherwise specified. Eight hours is the minimum period for the composite.

(2) Settleable Solids samples shall be collected between 10:00 A.M. and 2:00 P.M. or during the period of peak flow.

- d. contains solid or viscous substances in amounts which would cause obstruction to the flow in sewers or other interference with proper operation of the permittee's treatment works; or
 - e. in the case of a major contributing industry, as defined herein, contains an incompatible pollutant, as further defined herein, in an amount or concentration in excess of that allowed under standards or guidelines issued from time to time pursuant to Sections 304, 306, and/or 307 of the Clean Water Act.
2. Require 45 days prior notification to the permittee by any person or persons of a:
- a. proposed substantial change in volume or character of pollutants over that being discharged into the permittee's treatment works at the time of issuance of this permit;
 - b. proposed new discharge into the permittee's treatment works of pollutants from any source which would be a new source as defined in Section 306 of the Clean Water Act if such source were discharging pollutants; or
 - c. proposed new discharge into the permittee's treatment works of pollutants from any source which would be subject to Section 301 of the Clean Water Act if it were discharging such pollutants.
3. Require any industry discharging into the permittee's treatment works to perform such monitoring of its discharge as the permittee may reasonably require, including the installation, use, and maintenance of monitoring equipment methods, to keep records of the results of such monitoring, and to report the results of such monitoring to the permittee. Such records shall be made available by the permittee to the Secretary upon request.
4. Authorize the permittee's authorized representatives to enter into, upon, or through the premises of any industry discharging into the permittee's treatment works to have access to and copy any records, to inspect any monitoring equipment or method required under subsection 3 above, and to sample any discharge into the permittee's treatment works.

The permittee shall notify the Secretary of any discharge specified in subsection 2 above within 30 days of the date on which the permittee is notified of such discharge. This permit may be modified accordingly.

II. GENERAL CONDITIONS

A. MANAGEMENT REQUIREMENTS

1. Facility Modification / Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties as provided for in Section 1274 and 1275 of the Vermont Water Pollution Control Act. Any anticipated facility expansions or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

In addition, the permittee shall provide notice to the Secretary of the following:

- a. any new introduction of pollutants into the treatment works from a source which would be a new source as defined in Section 306 of the Clean Water Act if such source were discharging pollutants;
- b. except for such categories and classes of point sources or discharges specified by the Secretary, any new introduction of pollutants into the treatment works from a source which would be subject to Section 301 of the Clean Water Act if such source were discharging pollutants; and
- c. any substantial change in volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into such works at the time of issuance of the permit.

The notice shall include:

- i. the quality and quantity of the discharge to be introduced into the system, and
- ii. the anticipated impact of such change in the quality or quantity of the effluent to be discharged from the permitted facility.

2. Noncompliance Notification

In the event the permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:

- a. breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including, but not limited to, all pipes, transfer pumps,

compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units),

- b. accidents caused by human error or negligence, or
- c. other causes such as acts of nature,

the permittee shall notify the Secretary within 24 hours of becoming aware of such condition or by the next business day and shall provide the Secretary with the following information, in writing, within five (5) days:

- i. cause of non-compliance
- ii. a description of the non-complying discharge including its impact upon the receiving water;
- iii. anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;
- iv. steps taken by the permittee to reduce and eliminate the non-complying discharge; and
- v. steps to be taken by the permittee to prevent recurrence of the condition of non-compliance.

3. Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

- a. The permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to insure compliance with the conditions of this permit; and
- c. The operation and maintenance of this facility shall be performed only by qualified personnel. The personnel shall be certified as required under the Vermont Water Pollution Abatement Facility Operator Certification Regulations.

4. Quality Control

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

permit under the provisions of 10 V.S.A., Chapter 47, Section 1268. The permittee shall notify the Department of the emergency situation by the next working day.

10 V.S.A., Chapter 47, Section 1268 reads as follows:

"When a discharge permit holder finds that pollution abatement facilities require repairs, replacement or other corrective action in order for them to continue to meet standards specified in the permit, he may apply in the manner specified by the secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements or other corrective action. The permit may be issued without prior public notice if the nature of the emergency will not provide sufficient time to give notice; provided that the secretary shall give public notice as soon as possible but in any event no later than five days after the effective date of the emergency pollution permit. No emergency pollution permit shall be issued unless the applicant certifies and the secretary finds that:

- (1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the state during the limited period of time of the emergency;
- (2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;
- (3) the granting of an emergency pollution permit will result in some public benefit;
- (4) the discharge will not be unreasonably harmful to the quality of the receiving waters;
- (5) the cause or reason for the emergency is not due to wilful or intended acts or omissions of the applicant."

Application shall be made to the Secretary of the Agency of Natural Resources, Department of Environmental Conservation, 103 South Main Street, Waterbury, Vermont 05671-0405.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Secretary or authorized representative, upon the presentation of proper credentials:

- a. to enter upon the permittee's premises in which an effluent source or any records required to be kept under terms and conditions of the permit are located;
- b. to have access to and copy any records required to be kept under the terms and conditions of the permit;
- c. to inspect any monitoring equipment or method required in the permit; or

sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

NPDES - The National Pollutant Discharge Elimination System.

Secretary - The Secretary of the Agency of Natural Resources

State Certifying Agency Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division
103 South Main Street
Waterbury, Vermont 05671-0405

Weekly Average - (Average weekly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WASTEWATER MANAGEMENT DIVISION
103 SOUTH MAIN STREET
WATERBURY, VERMONT 05671-0405

FACT SHEET
(April 2006)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO
DISCHARGE TO WATERS OF THE UNITED STATES

NPDES NO: VT0100552
FILE NO: 11-25
PERMIT NO: 3-0365
PROJECT ID NO: RU96-0141

NAME AND ADDRESS OF APPLICANT:

Wallingford Fire District #1
PO Box 87
Wallingford, VT 05773

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Wallingford Fire District #1
75 School Street
Wallingford, Vermont

RECEIVING WATER: Otter Creek

CLASSIFICATION: Class B with a waste management zone. Class B waters are suitable for bathing and recreation, irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable for public water supply with filtration and disinfection. A waste management zone is a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings.

I. Proposed Action, Type of Facility, and Discharge Location

The above named applicant applied on February 27, 2006 to the Vermont Department of Environmental Conservation for renewal of the permit to discharge into the designated receiving water. At this time the Department has made a tentative decision to reissue the discharge permit. The facility is engaged in the treatment of municipal wastewater. The discharge is from the outfall of the Wallingford Fire District #1 Wastewater Treatment Facility to Otter Creek.

to supplement the federal technology based limitations to prevent a gross one-day permit effluent violation to be offset by multiple weekly and monthly sampling events which would enable a discharger to comply with the weekly average and monthly average permit limitations. Mass limits (22.5 lbs/day, monthly average and 30 lbs/day, weekly average) are derived by multiplying the concentration limits by a previously permitted flow (the current design flow was permitted in 1980). The TSS monthly monitoring requirement is unchanged from the previous permit.

pH - The pH limitation remains at 6.5 - 8.5 Standard Units as specified in Section 3-01 B.9. in the Vermont Water Quality Standards, effective July 2, 2000. Monitoring remains at daily.

Settleable Solids - The limitation of 1.0 ml/l instantaneous maximum and daily monitoring remain unchanged from the previous permit. This numeric limit was established in support of the narrative standard in Section 3-01 B.5. of the Vermont Water Quality Standards, effective July 2, 2000.

Total Phosphorus - The previous permit contained a monthly 'monitor only' phosphorus requirement. The 2002 "Lake Champlain Phosphorus Total Maximum Daily Load" established a phosphorus mass loading allocation for the Wallingford Fire District #1 WWTF utilizing an effluent concentration of 5.0 mg/l at the design flow of the facility (0.12 MGD). That allocation (0.829 metric tons per year or 1827 pounds per year) is being incorporated into this permit. Monitoring remains the same at monthly.

The annual total pounds is the sum of the twelve monthly totals, which are calculated by multiplying the total monthly flow x the monthly average phosphorus concentration x 8.34. The annual total must be submitted with the December monthly monitoring report and the running total pounds for each calendar year shall be included with each month's self-monitoring report.

***E. coli* Bacteria** - The *E. coli* limitation is 77/100 ml as specified in Section 3-04 B.3., Vermont Water Quality Standards, effective July 2, 2000. Monthly monitoring remains the same as in the previous permit.

Total Residual Chlorine (TRC) - The TRC limits of 1.0 mg/l, weekly average, and 2.0 mg/l, monthly average, are based on meeting the instream water quality acute and chronic chlorine criteria (0.019 mg/l and 0.011 mg/l respectively) in the Vermont Water Quality Standards, effective July 2, 2000 for the protection of aquatic biota. Daily monitoring is required.

Whole Effluent Toxicity (WET) and Priority Pollutant Testing - 40 CFR Part 122.44(d)(1) requires the Department to assess whether the discharge causes, has the reasonable potential to cause, or contribute to an excursion above any narrative or numeric water quality criteria. Whole Effluent Toxicity testing is not being required due to the fact that the instream waste concentration is less than 1 % and thus does not have the potential to cause an instream toxic impact.

Additional Monitoring - For all facilities with a design flow of greater than 0.1 MGD, 40 CFR § 122.21(j), Application for a permit, requires the submittal of effluent monitoring data for those parameters identified in Condition I.F.3. of the permit.

Samples must be collected once annually during various seasons (i.e. include each of the four quarters during the permit period) and the results submitted by December 31 of each year.

Waste Management Zone - As defined under 10 V.S.A. §1251(16), a waste management zone is "a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings. Throughout the receiving waters, water quality criteria must be achieved but increased health risks exist due to the authorized discharge".

The proposed permit retains the existing waste management zone (WMZ) that extends downstream from the outfall for approximately one mile in Otter Creek.

Electric Power Failure - Within 30 days of the effective date of the permit, the permittee must submit to the Department, documentation addressing how the discharge will be handled in the event of an electric power outage. The effluent must receive a minimum of primary treatment (or in the case of ultraviolet light disinfection systems, not less than secondary treatment) plus disinfection.

V. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from April 7 through May 7, 2006 during which time interested persons may submit their written views on the draft permit. All written comments received by 4:30 PM on May 7, 2006 will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department.

Written comments should be sent to:

Vermont Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division - Sewing Building
103 South Main Street
Waterbury, VT 05671-0405

Comments may also be faxed to: 802-241-2596.

Any interested person or groups of persons may request or petition for a public hearing with respect to this draft permit. Any such request or petition for a public hearing shall be filed within the public comment period described above and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted.

The Department will hold a hearing if there is significant public interest in holding such a hearing. Any public hearing brought in response to such a request or petition will be held in the geographical area of the proposed discharge or other appropriate area, at the discretion of the Department and may, as appropriate, consider related groups of draft permits. Any person may submit oral or written statements and data concerning the draft permit at the public hearing. The Department may establish reasonable limits on the time allowed for oral statements and may require the submission of statements in writing. All statements, comments, and data presented at the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit.

The complete application, draft permit, and other information are on file and may be inspected at the VTDEC, Wastewater Management Division, Waterbury Office. Copies will be made at a cost based on the current Secretary of State Official Fee Schedule for Copying Public Records from 8:00 AM to 4:30 PM, Monday through Friday. The draft permit and fact sheet may also be viewed on the Division's website at www.anr.state.vt.us/dec/ww/wwmd.cfm.